

**Iowa Department of Natural Resources
Environmental Protection Commission**

ITEM

18

DECISION

TOPIC **Final Rule: Air Quality Program Rules Chapters 22, 23, 25 and new
Chapter 34: Adoption of the federal Clean Air Mercury Rule
(CAMR).**

The Commission will be asked to approve amendments to Chapter 22, "Controlling Pollution," Chapter 23, "Emission Standards for Contaminants," Chapter 25, "Measurement of Emissions," and add new Chapter 34, "Provisions for Air Quality Emissions Trading Programs," of the 567 Iowa Administrative Code.

The purpose of the rule changes is to adopt the federal Clean Air Mercury Rule (CAMR) into the state air quality rules. The rules will also make necessary updates and changes to existing air quality rules to implement CAMR.

Two public hearings were held, one on February 21, 2006, and a second on February 22, 2006. Two oral comments were presented at the hearing on February 21. No oral comments were presented at the hearing on February 22. Five written comments were received prior to the close of the public comment period. The public comment period closed on February 27, 2006. Responses to the oral and written comments are provided on the attached responsiveness summary.

In response to comments, the Department made corrections and clarifications in the final rules. These changes are noted below and in the preamble of that attached rulemaking.

On May 18, 2005, the U.S. Environmental Protection Agency (EPA) promulgated CAMR. This rule will permanently cap and reduce the nationwide level of mercury emissions from coal-fired power plants, the largest remaining sources of mercury emissions in the country. EPA estimates that, when fully implemented, CAMR will reduce utility mercury emissions in 48 states to 15 tons annually, a reduction of 70 percent from 2002 levels.

The first phase of CAMR, set to occur in 2010, is a nationwide, 38 ton cap on mercury. The second phase of CAMR is a nationwide, 15 ton cap on mercury emissions, which will occur in 2018. This is based on the expectation that emerging control technologies for mercury, such as Activated Carbon Injection (ACI), will become proven, cost-effective and deployable on a large scale.

CAMR also includes a new source performance standard for coal fired electric generating units (EGUs) constructed after January 30, 2004. These new sources will need to meet a stringent

emission standard for mercury, as well as conduct emissions testing and continuous emissions monitoring for mercury.

Under CAMR, each state is provided with an annual emissions cap for mercury. States must meet the required targets by either 1) Adopting EPA's "model" rules that will require affected coal-fired electric generating units (EGUs) to participate in an EPA-administered interstate cap and trade program, or 2) Mandate source by source controls in such a way as to stay under the EPA-prescribed mercury cap.

In May, 2005, the Department convened a workgroup to assist with rulemaking activities related to the adoption CAMR. The majority of the workgroup members recommended that the Department adopt EPA's cap and trade program for regulating mercury emissions from coal-fired EGUs. The Iowa Sierra Club did not endorse the cap and trade recommendation, stating that it does not support a cap and trade approach to emissions reductions, particularly for control of mercury emissions.

Under an emissions trading approach to CAMR, each ounce of mercury emitted annually from an affected facility (EGU) will require that the affected facility use one mercury allowance. The mercury allowances are traded on an EPA-administered open market, which will establish the trade currency (allowance) value.

After carefully reviewing the CAMR provisions, considering the recommendations from all workgroup members, and reviewing the public comments received during the comment period, the Department is adopting EPA's cap and trade program for implementing CAMR. This approach is the appropriate method for meeting the federal requirements for reducing cumulative, national emissions of mercury from coal-fired EGUs.

The rules to adopt CAMR amend a number of other air quality rules. In particular, the Department is adopting a new Chapter 34 that will contain the emissions trading provisions for CAMR. It is expected that EPA will promulgate other regulations in the future that will use the cap and trade approach similar to CAMR for reducing air pollutant emissions. The creation of Chapter 34 for air emissions trading will facilitate having all of these similar provisions in one location in the air quality rules.

Additionally, some changes were made to the final rule from the Notice to clarify the Department's methodology for designating mercury allowances for "existing units" and "new units." The workgroup had recommended that a "new unit" does not become an "existing unit" unless revisions to these rules are made at a later date. In accepting the workgroup's recommendations, the Department inadvertently adopted by reference a portion of the federal regulations that would be inconsistent with this intent. EPA Region VII identified this inconsistency in comments that they provided during the public comment period.

EPA also provided comments stating that the proposed rules, as specified in the Notice, could be interpreted to indicate that the EPA Administrator, as manager of the mercury trading program, could elect to record the allowances specified in the Department's allowance allocation tables

indefinitely into the future, rather allocating the allowances only according to the minimum timing requirement's specified in the federal regulations. This was not the Department's intent.

To address these EPA comments, the Department is adopting clarifying language in the final rule to specify the allocation methodology for designating mercury allowances.

If the Commission approves these rules, they will be published in the Iowa Administrative Code on June 7, 2006 and will become effective on July 12, 2006.

An administrative rule fiscal impact statement is attached.

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Memo date: April 25, 2006

ENVIRONMENTAL PROTECTION COMMISSION [567]

Adopted and Filed

Pursuant to the authority of Iowa Code section 455B.133, the Environmental Protection Commission hereby amends Chapter 22, "Controlling Pollution," Chapter 23, "Emission Standards for Contaminants," Chapter 25, "Measurement of Emissions," and new Chapter 34, "Provisions for Air Quality Emissions Trading Programs," Iowa Administrative Code.

The purpose of the rule changes is to adopt the recently finalized federal Clean Air Mercury Rule (CAMR) into the state air quality rules. The rules will also make necessary updates and changes to existing air quality rules to implement CAMR.

The Notice of Intended Action was published in the Iowa Administrative Bulletin (IAB) on January 18, 2006, as ARC 4823B. Two public hearings were held, one on February 21, 2006, and a second on February 22, 2006. Two oral comments were presented at the hearing on February 21. No oral comments were presented at the hearing on February 22. Five written comments were received prior to the close of the public comment period. The public comment period closed on February 27, 2006.

The submitted comments and the Department's response to the comments are summarized in a responsiveness summary available from the Department. These final rules have been modified from the proposed rules published under the Notice of Intended Action to address the public comments, as detailed below.

On May 18, 2005, the U.S. Environmental Protection Agency (EPA) promulgated CAMR. These regulations will permanently cap and reduce mercury emissions from coal-fired power plants, the largest remaining sources of mercury emissions in the country. EPA estimates

that, when fully implemented, CAMR will reduce utility mercury emissions in 48 states to 15 tons, a reduction of 70 percent from current levels.

Mercury is a toxic, persistent pollutant that accumulates in the food chain. Atmospheric mercury falls to earth through rain, snow and dry deposition and enters lakes and rivers. Once there, it can transform into methylmercury and can build up in fish tissue. Women of childbearing age who may be exposed to mercury from eating contaminated fish are regarded as the population of greatest concern. Children exposed to methylmercury before birth may be at risk for neurobehavioral problems.

EPA states that it has conducted extensive analysis of mercury emissions from power plants and subsequent regional patterns of deposition in U.S. waters. Those analyses conclude that regional transport of mercury emissions from power plants in the U.S. account for very little of the mercury deposition in the U.S. About 99 percent of global mercury emissions come from various natural sources throughout the world, and human-caused sources, primarily coal-fired power plants from outside the U.S. The small contribution of mercury deposition from U.S. power plants will be significantly reduced when CAMR is fully implemented.

CAMR builds upon another closely related federal regulation, the Clean Air Interstate Rule (CAIR). The first phase of CAMR, set to occur in 2010, is a nationwide, 38-ton cap on mercury, which EPA states will be achieved by the “co-benefit” reductions of reducing SO₂ and NO_x under CAIR. That is, control technologies expected to be used to comply with CAIR, primarily flue gas desulfurization (FGD) for SO₂ control, and selective catalytic reduction (SCR) for NO_x control, will also control mercury emissions and will achieve the first phase cap.

The second phase of CAMR is a nationwide, 15-ton cap on mercury emissions, which will occur in 2018. The second phase cap is based on the expectation that emerging control

technologies for mercury, such as activated carbon injection (ACI), will become proven, cost-effective and deployable on a large scale.

CAMR also includes a new source performance standard for coal-fired electrical generating units (EGUs) constructed after January 30, 2004. These new sources will be required to meet a stringent emissions standard for mercury, as well as to conduct emissions testing and continuous monitoring for mercury.

Under CAMR, each state is provided with an annual emissions cap for mercury. Each state must meet the required mercury reductions either by (1) adopting EPA regulations that will require affected coal-fired, electric generating units (EGUs) to participate in an EPA-administered interstate cap and trade program, or (2) mandating source-by-source controls in such a way as to stay under the EPA-prescribed mercury cap.

In May 2005, the Department convened a workgroup to assist with rule-making activities related to the adoption of CAMR. The workgroup's goal was to provide rule-making recommendations on the implementation options of the federal regulations. The Department invited the following parties to participate in the workgroup:

- Investor-owned, municipal and rural electric cooperative utilities;
- Iowa Association of Municipal Utilities and Iowa Utilities Association;
- Iowa Utilities Board and Consumer Advocate Office;
- Iowa's university power plants;
- Sierra Club and Iowa Environmental Council;
- Iowa Association of Business and Industry;
- Iowa Department of Economic Development;
- U.S. EPA Region VII; and

- Department's Air Quality and Energy Bureaus.

The workgroup met five times between May and August 2005. All workgroup invitees, even those that elected not to participate in meetings, remained on the Department's E-mail distribution list and were kept informed of the workgroup's activities and meeting dates.

The majority of the workgroup members recommended that the Department adopt EPA's cap and trade program for regulating mercury emissions from coal-fired electric generating units (EGUs). The Iowa Sierra Club did not endorse the cap and trade recommendation, stating that it does not support a cap and trade approach to emissions reductions, particularly for control of mercury emissions.

Under an emissions trading approach to CAMR, each ounce of mercury emitted annually from an affected facility (EGU) will require that the affected facility use one mercury allowance. The mercury allowances are traded on an EPA-administered open market, which will establish the trade currency (allowance) value.

Adopting the cap and trade approach to CAMR offers several advantages. The affected facilities are allowed the flexibility to determine the most appropriate method of compliance by securing allowances, reducing emissions, or instituting some combination of these approaches. The affected EGUs must still comply with CAMR's requirements for continuous emissions monitoring for mercury.

The EPA-managed trading program also establishes automatic and punitive penalties on facilities that do not hold the required number of allowances at the end of each year. Further, states that adopt EPA's cap and trade program to implement CAMR are afforded "automatic approval" of the required revisions to their state implementation plans (SIPs). Iowa has until November 17, 2006, to adopt CAMR and submit the revisions for incorporation into Iowa's SIP.

After carefully reviewing the CAMR provisions, considering the recommendations from all workgroup members, and reviewing all public comments submitted during the comment period, the Department is adopting EPA's cap and trade program for implementing CAMR. This approach is the appropriate method for meeting the federal requirements for reducing cumulative, national emissions of mercury from coal-fired EGUs.

The Department responded to the Commission's concerns, raised at the November 2005 Commission meeting, that the CAMR cap and trade provisions could allow adverse, local impacts resulting from mercury emissions from specific sources. To address this concern, the Department is adopting an amendment to Chapter 22, described below in the paragraph that summarizes Item 1.

These amendments to implement CAMR will also amend a number of other air quality rules. CAMR amended the federal new source performance standards in 40 CFR Part 60 for electric utility steam generating units. The Department adopts these changes in Chapter 23. CAMR also amended emissions testing methods under 40 CFR Parts 60 and 75. The Department amends Chapter 25 to adopt these changes.

Additionally, the Department adopts a new Chapter 34 that will contain the emissions trading provisions for CAMR. It is expected that EPA will promulgate other regulations in the future that will use the cap and trade approach similar to that of CAMR for reducing air pollutant emissions. The creation of Chapter 34 for air emissions trading will facilitate having all of these similar provisions in one location in the air quality rules.

The Department is adopting a separate, similar rule making to implement the Clean Air Interstate Rule (CAIR). CAMR and CAIR are closely related because both allow primary implementation through an EPA-administered emissions cap and trade program. However, the

Department kept the CAMR and CAIR Notices of Intended Action separate in case one of the rule makings was delayed or terminated.

Item 1 amends subrule 22.3(5), which contains the conditions under which the Director may, after public notice of such a decision, modify an existing air construction permit for a major stationary source. The Department is adopting this amendment to address issues raised at the November 2005 Environmental Protection Commission meeting. Some members of the Commission expressed concern that the CAMR cap and trade provisions would not prevent adverse, local impacts resulting from the mercury emissions from specific sources. This amendment specifies that the Director may modify such permits to mitigate excessive mercury deposition.

Item 2 amends subrule 23.1(2) to update the new source performance standards to the May 18, 2005, date on which EPA promulgated CAMR, and thus amended 40 CFR Part 60, including the general provisions, certain subparts, and the appendices.

Item 3 amends paragraph 23.1(2)“z,” standards for electric utility steam generating units, to adopt changes that EPA made to this standard to implement CAMR. In particular, EPA amended the definition for electric utility steam generating units, and added an emission standard for mercury for coal-fired units constructed or reconstructed after January 30, 2004.

Item 4 amends subrule 23.1(4) to note that the standards for mercury emissions from electric utility steam generating units are set forth in subrules 23.1(2) and 23.1(5), and in 567—Chapter 34. Subrule 23.1(4) is the location in which the Department has adopted federal regulations under 40 CFR Part 63 for hazardous air pollutants (HAPs) for source categories. Although mercury remains listed as a HAP, EPA is regulating mercury emissions from the

electric utility steam generating units under 40 CFR Part 60, and not under 40 CFR Part 63. This amendment to subrule 23.1(4) directs the reader to the correct location of these rules.

Item 5 amends subrule 23.1(5) to reflect the May 18, 2005, date on which EPA promulgated CAMR and amended the emission guidelines contained in 40 CFR Part 60, including Subpart B and several appendices.

Item 6 amends subrule 23.1(5) to adopt a new paragraph “d,” containing a reference to the emission guidelines for mercury from coal-fired electric utility steam generating units. Subrule 23.1(5) is the subrule in which other federal emissions guidelines have been adopted. However, the CAMR provisions for 40 CFR Part 60, Subpart HHHH, are adopted in 567—Chapter 34. This new paragraph directs the reader to 567—Chapter 34.

Item 7 amends subrule 25.1(9), methods and procedures, to reflect the May 18, 2005, date on which EPA promulgated CAMR and amended the stack sampling methods and specifications contained in the appendices of 40 CFR Parts 60 and 75.

Item 8 amends rule 567—25.2(455B), continuous emission monitoring under the Acid Rain program, to reflect the May 18, 2005, date on which EPA promulgated CAMR and amended 40 CFR Part 75 and its appendices.

Item 9 amends 567—Chapter 25 to add new rule 25.3(455B) for continuous emissions monitoring under CAMR, which adopts 40 CFR Part 75 and its appendices, as amended through May 18, 2005.

Item 10 adopts new 567—Chapter 34 for air quality emissions trading programs. The provisions included in rules include the requirements for CAMR.

In general, the federal regulations for the CAMR emissions cap and trade program are adopted in Chapter 34 by reference. However, the rules do note several sections of the federal regulations that are not adopted by reference.

The provisions of Chapter 34 include the total mercury (Hg) state trading budget for Iowa, and two tables showing the annual Hg allowance allocations to each designated Hg unit in the state. The two tables show Hg allocations for existing and new Hg units. The Department is adopting the federal rule provisions for determining the Hg allowance allocations. Upon annual allocation, the designated units may track, transfer, bank and record the allowances, as specified in the federal regulations adopted by reference. EPA will be the designated authority for implementing these components of the CAMR cap and trade program.

The Department is adopting the federal rule provisions for classifying existing units and new units. However, the Department, based on recommendations from the workgroup members, is allocating the annual allowances for all new units at the time that Chapter 34 is adopted. A "new unit" is always considered to be a "new unit," and does not become an "existing unit" unless revisions to these rules are made at a later date. The Notice preamble included an explanation of this methodology, as well as mercury allowance allocation tables in the rule text that illustrated this methodology. However, in the Notice, the Department inadvertently proposed to adopt by reference a portion of the federal regulations that would be inconsistent with this intent. EPA Region VII identified this inconsistency in comments that they provided during the public comment period.

EPA also provided comments stating that the proposed rules, as specified in the Notice, could be interpreted to indicate that the EPA Administrator, as manager of the mercury trading program, could elect to record the allowances specified in the Department's allowance allocation

tables indefinitely into the future, rather allocating the allowances only according to the minimum timing requirement's specified in the federal regulations. This was not the Department's intent.

To address these EPA comments, the Department is adopting clarifying language in the final rule to specify the allocation methodology for designating mercury allowances for "existing units" and "new units." The language in the final rule is consistent with the federal regulations, except that the language clarifies that allowances will be allocated in future years only to meet the minimum timing requirements specified in the federal regulations. Additionally, the language in the final rule does not include the portions of the federal regulations which contain the methodology for how a "new unit" automatically becomes an "existing unit" over time. The language in the final rule is adopted in lieu of adopting by reference the applicable portions of 40 CFR 60.4142. Under EPA's rules, the states have full discretion and flexibility on allowance allocations.

These amendments are intended to implement Iowa Code section 455B.133. These amendments will become effective on July 12, 2006.

The following amendments are adopted.

ITEM 1. Amend subrule 22.3(5) as follows:

22.3(5) Modification of a permit. The director may, after public notice of such decision, modify a condition of approval of an existing permit for a major stationary source or an emission limit contained in an existing permit for a major stationary source if necessary to attain or maintain an ambient air quality standard, or to mitigate excessive deposition of mercury.

ITEM 2. Amend subrule 23.1(2), introductory paragraph, as follows:

23.1(2) New source performance standards. The federal standards of performance for new stationary sources, as defined in 40 Code of Federal Regulations Part 60 as amended or corrected through ~~July 14, 2004~~, May 18, 2005, are adopted by reference, except § 60.530 through § 60.539b (Part 60, Subpart AAA), and shall apply to the following affected facilities. The corresponding 40 CFR Part 60 subpart designation is in parentheses. Reference test methods (Appendix A), performance specifications (Appendix B), determination of emission rate change (Appendix C), quality assurance procedures (Appendix F) and the general provisions (Subpart A) of 40 CFR Part 60 also apply to the affected facilities.

ITEM 3. Amend paragraph **23.1(2)“z”** as follows:

z. Electric utility steam generating units. An electric utility steam generating unit that is capable of combusting more than 250 million Btus per hour (73 megawatts) heat input of fossil fuel and for which construction or modification or reconstruction is commenced after September 18, 1978, or an electric utility combined cycle gas turbine that is capable of combusting more than 250 million Btus per hour (73 megawatts) heat input. An electric utility steam generating unit is any fossil fuel–fired combustion unit of more than 25 megawatts electric (MW) that serves a generator that produces electricity for sale. A unit that cogenerates steam and electricity and supplies more than one–third of its potential electric output capacity and more than 25 MW output to any utility power distribution system for sale is also an electric utility steam generating unit. This standard also includes a provision for mercury emissions for any coal–fired electric utility steam generating unit other than an integrated gasification combined cycle electric steam generating unit, for which construction or reconstruction commenced after January 30, 2004. (Subpart Da as amended through May 18, 2005)

ITEM 4. Amend subrule 23.1(4), introductory paragraph, as follows:

23.1(4) Emission standards for hazardous air pollutants for source categories. The federal standards for emissions of hazardous air pollutants for source categories, 40 Code of Federal Regulations Part 63 as amended or corrected through January 10, 2005, are adopted by reference, except those provisions which cannot be delegated to the states. The corresponding 40 CFR Part 63 subpart designation is in parentheses. 40 CFR Part 63, Subpart B, incorporates the requirements of Clean Air Act Sections 112(g) and 112(j) and does not adopt standards for a specific affected facility. Test methods (Appendix A), sources defined for early reduction provisions (Appendix B), and determination of the fraction biodegraded (F_{bio}) in the biological treatment unit (Appendix C) of Part 63 also apply to the affected activities or facilities. For the purpose of this subrule, “hazardous air pollutant” has the same meaning found in 567—22.100(455B). For the purposes of this subrule, a “major source” means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless a lesser quantity is established, or in the case of radionuclides, where different criteria are employed. For the purposes of this subrule, an “area source” means any stationary source of hazardous air pollutants that is not a “major source” as defined in this subrule. Paragraph 23.1(4)“a,” general provisions (Subpart A) of Part 63, shall apply to owners or operators who are subject to subsequent subparts of 40 CFR Part 63 (except when otherwise specified in a particular subpart or in a relevant standard) as adopted by reference below. The provisions of 40 CFR Part 60, Subparts A, B, Da, and HHHH for the Clean Air Mercury Rule (CAMR), are found at subrules 23.1(2) and 23.1(5) and in 567—Chapter 34.

ITEM 5. Amend subrule 23.1(5), introductory paragraph, as follows:

23.1(5) Emission guidelines. The emission guidelines and compliance times for existing sources, as defined in 40 Code of Federal Regulations Part 60 as amended through ~~July 23, 2001~~ May 18, 2005, shall apply to the following affected facilities. The corresponding 40 CFR Part 60 subpart designation is in parentheses. The control of the designated pollutants will be in accordance with federal standards established in Sections 111 and 129 of the Act and 40 CFR Part 60, Subpart B (Adoption and Submittal of State Plans for Designated Facilities), and the applicable subpart(s) for the existing source. Reference test methods (Appendix A), performance specifications (Appendix B), determination of emission rate change (Appendix C), quality assurance procedures (Appendix F) and the general provisions (Subpart A) of 40 CFR Part 60 also apply to the affected facilities.

ITEM 6. Amend subrule **23.1(5)** by adopting new paragraph “d”:

d. Emission guidelines for mercury for coal-fired electric utility steam generating units. The provisions of 40 CFR Part 60, Subpart HHHH, are set forth in 567—Chapter 34.

ITEM 7. Amend subrule 25.1(9) as follows:

25.1(9) Methods and procedures. Stack sampling and associated analytical methods used to evaluate compliance with emission limitations of 567—Chapter 23 or a permit condition are those specified in the “Compliance Sampling Manual*” adopted by the commission on May 19, 1977, as revised through January 30, 2003. Sampling methods, analytical determinations, minimum performance specifications and quality assurance procedures for performance evaluations of continuous monitoring systems are those found in Appendices A (as amended through October 17, 2000), B (as amended through ~~January 12, 2004~~ May 18, 2005) and F (as amended through January 12, 2004) of 40 CFR Part 60, and Appendices A (as amended through ~~August 16, 2002~~ May 18, 2005), and B (as amended through ~~September 9, 2002~~ May 18, 2005),

F (as amended through May 18, 2005) and K (as amended through May 18, 2005) of 40 CFR Part 75.

*Available from the department.

ITEM 8. Amend rule 567—25.2(455B) as follows:

567—25.2(455B) Continuous emission monitoring under the acid rain program.

The continuous emission monitoring requirements for affected units under the acid rain program as provided in 40 CFR 75, as adopted January 11, 1993, and including Appendices A, B, F and K as corrected or amended through ~~October 24, 1997~~ May 18, 2005, are adopted by reference.

ITEM 9. Amend 567—Chapter 25 by adopting **new** rule 567—25.3(455B) as follows:

567—25.3(455B) Continuous emission monitoring under the Clean Air Mercury Rule (CAMR). The provisions in 40 CFR Part 75, including Appendices A, B, F and K, as amended through May 18, 2005, are adopted by reference.

ITEM 10. Adopt **new** 567—Chapter 34 as follows:

CHAPTER 34
PROVISIONS FOR AIR QUALITY
EMISSIONS TRADING PROGRAMS

567—34.1(455B) Purpose. This chapter implements the provisions for certain federal air emissions trading programs to control emissions of specific pollutants.

567—34.2 to 34.299 Reserved.

567—34.300(455B) Provisions for air emissions trading and other requirements for the Clean Air Mercury Rule (CAMR). The CAMR provisions in 40 CFR Part 60, Subpart HHHH, as amended through May 18, 2005, are adopted as indicated in rules 567—34.301(455B) through

567— 34.308(455B). Additional provisions for CAMR are set forth in 567—subrule 23.1(2), paragraph 23.1(2)“z,” subrule 23.1(5), and subrule 25.1(9) and rule 567—25.3(455B).

567—34.301(455B) Mercury (Hg) budget trading program general provisions. The provisions in 40 CFR 60.4101 through 60.4108 as amended through May 18, 2005, are adopted by reference, except that the definition of “permitting authority” in 60.4102 shall mean the department of natural resources. Other terms contained in rules 567— 34.301(455B) through 34.308(455B), and in Tables 3A and 3B, shall have the meanings set forth in 60.4102.

567—34.302(455B) Hg designated representative for Hg budget sources. The provisions in 40 CFR 60.4110 through 60.4114 as amended through May 18, 2005, are adopted by reference.

567—34.303(455B) General Hg budget trading program permit requirements. The provisions in 40 CFR 60.4120 through 60.4124 as amended through May 18, 2005, are adopted by reference.

567—34.304(455B) Hg allowance allocations. The provisions in 40 CFR 60.4141 as amended through May 18, 2005, are adopted by reference, except as indicated in this rule.

34.304(1) State trading budget. The provisions of 40 CFR 60.4140 are not adopted by reference. The state’s trading budget for annual allocations of Hg allowances for each control period from 2010 through 2017 is 0.727 tons (23,264 ounces). The state’s trading budget for annual allocations of Hg allowances for the control period, starting in 2018, and for each control period thereafter, is 0.287 tons (9,184 ounces).

34.304(2) Hg allowance allocations. The provisions of 40 CFR 60.4142 are not adopted by reference. The provisions in this subrule for Hg allowance allocations are adopted in lieu thereof.

a. The baseline heat input used with respect to CAMR Hg allowance allocations under paragraph "b" of this subrule for each CAMR Hg unit will be:

(1) For units commencing operation before January 1, 2001 (existing units), the average of the three highest amounts of the units' adjusted control period heat input (in mmBTU) for 2000 through 2004, with the adjusted control period heat inputs for each year calculated as follows:

1. Any portion of the unit's control period heat input for the year that results from the unit's combustion of lignite, multiplied by 3.0;

2. Any portion of the unit's control period heat input for the year that results from the unit's combustion of subbituminous coal, multiplied by 1.25; and

3. Any portion of the unit's control period heat input for the year that is not covered by number paragraphs "1" and "2", multiplied by 1.0

(2) For units commencing operation on or after January 1, 2001 and commencing construction before January 1, 2006 (new units), the nameplate capacity of the generator being served, provided that if a generator is served by two or more units, then the nameplate capacity will be attributed to each unit in equal fraction of the total nameplate capacity, multiplied by 7900 BTU/kW.

b.(1) For each control period in 2009 and thereafter, but for no control period later than that control period required to meet the minimum timing requirements specified in 40 CFR 60.4141(a) and 60.4141(b)(1), the department will allocate to all CAMR Hg units with a baseline heat input as determined in subparagraph "a"(1) for existing units a total amount of CAMR Hg allowances equal to 95 percent for each control period from 2009 through 2017, and 97 percent

for each control period 2018 and thereafter, of the tons of Hg emissions in the state trading budget specified in subrule 34.304(1).

(2) The department will allocate CAMR Hg allowances to each CAMR Hg unit under subparagraph "b"(1) for existing units in an amount determined by multiplying the total amount of CAMR Hg allowances allocated under subparagraph "b"(1) by the ratio of the baseline heat input of such a CAMR Hg unit to the total amount of baseline heat input of all such CAIR NO_x units and rounding to the nearest whole allowance as appropriate.

c.(1) For each control period in 2009 and thereafter, but for no control period later than is required to meet the minimum timing requirements set forth in 40 CFR 60.4141(a) and 60.4141(b)(1), the department will allocate to all CAMR Hg units with a baseline heat input as determined in subparagraph "a"(2) for new units a total amount of CAMR Hg allowances equal to 5 percent for each control period from 2009 through 2017, and 3 percent for each control period in 2018 and thereafter, of the tons of Hg emissions in the state trading budget as specified in subrule 34.304(1).

c.(2) The department will allocate CAMR Hg allowances to each CAMR Hg unit under subparagraph "c"(1) for new units in an amount determined by multiplying the total amount of CAMR Hg allowances allocated under subparagraph "c"(1) by the ratio of the baseline heat input of such a CAMR Hg unit to the total amount of baseline heat input of all such CAMR Hg units and rounding to the nearest whole allowance as appropriate.

d. The unit allocations of CAMR Hg allowances described in subparagraphs "b"(2) and "c"(2) are set forth in Tables 3A and 3B. Upon allocation, allowances may be tracked, transferred, banked and recorded as specified under 40 CFR 60.4150 through 60.4176, as amended through May 18, 2005.

Table 3A. Mercury (Hg) Allowance Allocations for Existing Units in Ounces Per Year

Facility ID	County	Unit ID	2010 – 2017	2018 and thereafter
Ames	Story	7	68	28
Ames	Story	8	244	98
Burlington Generating Station	Des Moines	1	823	332
Council Bluffs Energy Center	Pottawattamie	1	220	88
Council Bluffs Energy Center	Pottawattamie	2	330	133
Council Bluffs Energy Center	Pottawattamie	3	2961	1194
Dubuque Generation Station	Dubuque	1	151	61
Dubuque Generation Station	Dubuque	5	104	42
Dubuque Generation Station	Dubuque	6	15	6
Earl F Wisdom Generation Station	Clay	1	43	17
Fair Station	Muscatine	2	117	47
George Neal North	Woodbury	1	547	221
George Neal North	Woodbury	2	1020	411
George Neal North	Woodbury	3	1925	776
George Neal South	Woodbury	4	2526	1018
Lansing Generating Station	Allamakee	1	4	2
Lansing Generating Station	Allamakee	2	9	4
Lansing Generating Station	Allamakee	3	116	47
Lansing Generating Station	Allamakee	4	834	336
Louisa Station	Muscatine	101	2823	1138
Milton L Kapp Generating Station	Clinton	2	779	314
Muscatine	Muscatine	8	349	141
Muscatine	Muscatine	9	686	277
Ottumwa Generating Station	Wapello	1	2982	1202
Pella Station	Marion	6	50	20
Pella Station	Marion	7	51	20
Prairie Creek Generating Station	Linn	3	227	91
Prairie Creek Generating Station	Linn	4	552	222
Riverside Station	Scott	9	423	170
Sixth Street Generating Station	Linn	2	84	34
Sixth Street Generating Station	Linn	3	89	36
Sixth Street Generating Station	Linn	4	66	27
Sixth Street Generating Station	Linn	5	142	57
Streeter Station	Black Hawk	7	60	24
Sutherland Generating Station	Marshall	1	151	61
Sutherland Generating Station	Marshall	2	152	61
Sutherland Generating Station	Marshall	3	378	152

Table 3A. Mercury (Hg) Allowance Allocations for New Units in Ounces Per Year

Facility ID	County	Unit ID	2010 – 2017	2018 and thereafter
Council Bluffs Energy Center	Pottawattamie	4	1163	276

567—34.305(455B) Hg allowance tracking system. The provisions in 40 CFR 60.4150 through 60.4157 as amended through May 18, 2005, are adopted by reference.

567—34.306(455B) Hg allowance transfers. The provisions in 40 CFR 60.4160 through 60.4162 as amended through May 18, 2005, are adopted by reference.

567—34.307(455B) Monitoring and reporting. The provisions in 40 CFR Part 60.4170 through 60.4176 as amended through May 18, 2005, are adopted by reference.

567—34.308(455B) Performance specifications. The provisions in 40 CFR Part 60, Appendix B as amended through May 18, 2005, are adopted by reference.

These rules are intended to implement Iowa Code section 455B.133.

Date

Jeffrey R. Vonk, Director

Administrative Rule Fiscal Impact Statement

Date: 12/1/05

Agency: Department of Natural Resources

IAC Citation: 567 IAC 22.3(5), 23.1(2), 23.1(2)"z," 23.1(4), 23.1(5), 23.1(5)"d," 25.1(9), 25.2, 25.3 and Chapter 34 (455B).

Agency Contact: Anne Preziosi

Summary of the Rule: The proposed rules will adopt the federal Clean Air Mercury Rule (CAMR). The proposed rules will also make amendments to state rules adopting federal new source performance standards, federal emission guidelines, emissions testing methods and continuous emissions monitoring methods to reflect changes in the federal rules to promulgate CAMR.

The U.S. Environmental Protection Agency (EPA) promulgated the CAMR provisions to permanently cap and reduce national levels of mercury emissions from coal-fired electric generating units (EGUs), the largest remaining source of mercury emissions in the country. EPA estimates that, when fully implemented, CAMR will reduce utility mercury emissions in 48 states to 15 tons annually, a reduction of approximately 70% from 2002 levels. National reductions will be achieved through a two phased approach. The first phase will occur in 2010, and will be a 38 ton cap on mercury. The second phase will occur in 2018, and will institute the national, 15-ton cap on mercury emissions. CAMR also includes a new source performance standard for "new" coal fired EGUs constructed after January 30, 2004.

EPA has determined that controlling mercury emissions from coal-fired EGUs through a phased approach that builds upon another federal rule, the Clean Air Interstate Rule (CAIR), is cost-effective and will achieve the desired emissions reductions. As such, EPA provided two options for states to implement CAIR: 1) Adopt EPA "model" rules that require EGUs to participate in an EPA-administered, interstate emissions cap and trade program, or 2) Meet individual state emissions budgets through other control measures. The Department convened a stakeholder workgroup to discuss the CAMR implementation options. After considering recommendations from all workgroup members, the Department is proposing to adopt EPA's cap and trade program.

Under the cap and trade approach for CAMR, EPA allocates emissions allowance budgets to the state for mercury emissions. The state is responsible for allocating the initial mercury allowances to CAMR-affected facilities. Each allowance is equal to one **ounce** of mercury emissions. Upon initial allocation of the mercury allowances, coal-fired EGUs can then trade them through an EPA-managed trading program. Market forces determine the trade currency (allowance) values. At the end of each year, each affected EGU must hold one allowance for each ounce of mercury emitted. EGUs may comply with this requirement through some combination of securing allowances or reducing emissions.

Fill in this box if the impact meets these criteria:

☒ No Fiscal Impact to the State.

☐ Fiscal Impact of less than \$100,000 annually or \$500,000 over 5 years.

☐ Fiscal Impact cannot be determined.

Brief Explanation:

The Department expects to implement the CAMR provisions through existing revenues.

Fill in the form below if the impact does not fit the criteria above:

___ Fiscal Impact of \$100,000 annually or \$500,000 over 5 years.

* Fill in the rest of the Fiscal Impact Statement form.

Assumptions:

Describe how estimates were derived:

Estimated Impact to the State by Fiscal Year

	<u>Year 1 (FY ____)</u>	<u>Year 2 (FY ____)</u>
Revenue by Each Source:		
GENERAL FUND		
FEDERAL FUNDS		
Other (specify)		
TOTAL REVENUE	_____	_____
Expenditures:		
GENERAL FUND		
FEDERAL FUNDS		
Other (specify)		
TOTAL EXPENDITURES	_____	_____
NET IMPACT		

x This rule is required by State law or Federal mandate.

Please identify the state or federal law:

These rules implement Clean Air Act Section 110 and 111, as codified in 40 Code of Federal Regulations (CFR) Parts 60 and 75. States must adopt rules and submit to EPA a State Implementation Plan (SIP) to implement CAMR by November 2006. The federal CAMR rules specify that states adopting EPA's cap and trade program will have "automatic approval" of their SIPs. EPA has stated that if states do not adopt state CAMR rules into their SIPs by the required deadline, EPA will impose a Federal Implementation Plan (FIP), which will be EPA's cap and trade program.

___ Funding has been provided for the rule change.

Please identify the amount provided and the funding source:

x Funding has not been provided for the rule.

Please explain how the agency will pay for the rule change:

The proposed rule changes will not affect expenditures or revenues to the state.

Fiscal impact to persons affected by the rule:

The proposed CAMR rules will affect facilities with coal-fired EGUs. The mercury cap and trade provisions of CAMR are expected to impact approximately 16 utilities in the state with affected EGUs. These utilities include a mix of investor-owned utilities and cooperative utilities.

EPA determined that achieving mercury reductions by controlling emissions from coal-fired EGUs through a cap and trade program was highly cost effective. The total, annual cost for all of the affected Iowa EGUs to comply with the CAMR cap and trade program, beginning in 2010, is estimated at approximately \$44 million. However, EPA provides Iowa the option to defer approximately \$33 million of this annual cost by issuing emissions allowances to affected EGUs. The Department is proposing this option, and will distribute EPA's allowances to affected EGUs at no cost. As such, the total, annual cost to affected EGUs to comply with the EPA-determined mercury targets is estimated at \$11 million. EPA will reduce the number of available allowances in 2018 at which time the total, annual cost to Iowa EGUs for compliance is estimated at \$32 million.

It is expected that some facilities will achieve the required emission targets by installing pollution control equipment. However, EPA has determined that most affected EGUs will achieve the 2010 target for CAMR through the requirements of the separate Clean Air Interstate Rule (CAIR), and will not install specific mercury controls to meet the 2018 cap until 2015. Mercury emissions controls, such as activated carbon injection, have not yet been installed commercially on EGUs. As such, the capital and annual costs of installing and operating control equipment cannot be estimated at this time.

Affected EGUs will also have costs associated with continuous emissions monitoring (CEMS) for mercury, and CEMS equipment certification, beginning in 2008. Affected facilities have a choice of methods and equipment for complying with the monitoring requirements, none of which is currently employed commercially. As such, the monitoring costs associated with the CAMR provisions cannot be properly estimated at this time.

Fiscal impact to Counties or other Local Governments (required by Iowa Code 25B.6):

Four municipal utilities in the state are affected by the mercury emission targets for coal-fired EGUs. These municipals are impacted in the same manner as outlined above for investor-owned and cooperative utilities. The total, annual cost for all Iowa municipals to comply with the CAMR cap and trade program, beginning in 2010, is estimated at approximately \$2.2 million. However, EPA provides Iowa the option to defer approximately \$1.7 million of this annual cost to affected municipals by issuing emissions allowances. The Department is proposing this option, and will distribute EPA's allowances to affected municipals at no cost. As such, the total, annual cost to affected municipals to comply with the EPA-determined mercury targets, beginning in 2010, is estimated at \$525,000. EPA will reduce the number of available allowances in 2018 at which time the total, annual cost to municipals for compliance is estimated at \$1.5 million.

The affected municipal utilities may incur costs for mercury pollution control equipment in the same way as described above for other, affected EGUs. Municipals will also incur costs for mercury monitoring, beginning in 2008, as described above for other affected EGUs.

* If additional explanation is needed, please attach extra pages.

Agency Representative preparing estimate: Chad Daniel
Telephone Number: 242-6494

**PUBLIC PARTICIPATION RESPONSIVENESS SUMMARY
FOR
567 Iowa Administrative Code Chapter 22, "Controlling Pollution," Chapter 23,
"Emission Standards for Contaminants," Chapter 25, "Measurement of Emissions," and
new Chapter 34, "Provisions for Air Quality Emissions Trading Programs,"
[adoption of the Clean Air Mercury Rule (CAMR)]**

Introduction

The Notice of Intended Action was published in the Iowa Administrative Bulletin (IAB) on January 18, 2006, as ARC 4824B. Two public hearings were held, one on February 21, 2006 and a second on February 22, 2006. Two comments were received at the public hearing on February 21. No comments were received at the hearing on February 22. Five written comments were submitted prior to the close of the public comment period. The public comment period closed on February 27, 2006. A transcript of the oral comments and copies of the written comments are attached. The Department's response to the comments are below.

Public Comment #1

Submitted orally by Jim Klosterbuer of Alliant Energy, Cedar Rapids, Iowa.

The commenter noted that he was a member of the original workgroup formed to provide recommendations to the Department on how to implement CAIR in Iowa. He complimented the Department for forming this group, and stated that he thinks this is a good way to come up with rules to implement in the state that work best for the companies in the state.

Department Response

No response needed.

Recommended Action

No action recommended.

Public Comment #2

Submitted orally from Alan Arnold of Alliant Energy, representing Interstate Power and Light Company, a utility subsidiary of Alliant Energy, Cedar Rapids, Iowa.

The commenter wanted to reiterate the comments from Mr. Klosterbuer regarding Alliant's acceptance of the workgroup to come up with acceptable rulemaking activities that they feel will be a viable method for ensuring compliance with CAIR and CAMR in Iowa. Mr. Arnold submitted a formal comment letter to the Department reflecting the company's position.

Department Response

No response needed.

Recommended action

No action recommended.

Public Comment #3

Submitted in writing by Alan J. Arnold, Senior Environmental Specialist, Alliant Energy, representing Interstate Power and Light Company, Cedar Rapids, Iowa.

The commenter noted that Interstate Power and Light (IPL) was an invited party to the Department's workgroup. The commenter stated that IPL believes the rules being proposed are well crafted and will lead to effective implementation of the federal CAIR and CAMR rules in Iowa. Further, by adopting the cap and trade approach to CAIR and CAMR, it offers flexibility to determine the most appropriate method of compliance. The comments concluded by stating the IPL supports the current CAIR and CAMR rules as proposed by the Department.

Department's Response

No response needed.

Recommended Action

No action needed.

Public Comment #4

Provided in writing, by electronic mail, by Charles Winterwood, Air Quality Chair, Sierra Club, Iowa Chapter, Dubuque, Iowa.

The commenter provided an explanation of the Sierra Club's position on trading, including a list of conditions that must apply to trading programs. The commenter did not provide specific recommendations regarding the CAIR or CAMR notices.

The comments included an introductory statement describing the overall process that must be in place for a trading program, including full public notice, disclosure, participation, oversight, accountability, verification, and effective enforcement, with rights of appeal for affected citizens and administrative and judicial remedies. This statement was followed by a list of conditions that the commenter stated must apply for any trading program.

The commenter provided a second list of circumstances which should not occur in any trading program. This list included

- Violation of ambient standards, expanded pollution at grandfathered sites, significant deterioration of soils, air, water and ecosystems;
- Increased release of toxics at the point of release, such as heavy metals, neurotoxins, carcinogens, mutagens or bioaccumulative agents;
- Backsliding on pollution control obligations;
- Build up of pollution in nonattainment areas;
- Monopolization of allowances;

- Trading in communities that disapprove of trades; and
- Disproportionate burden on communities already burdened by toxics.

Department Response

In response to the commenter's introductory statement, the Department has followed all administrative rulemaking procedures for the adoption of CAMR, which included full disclosure to the public and the opportunity to participate in the rulemaking process through a public comment period and two public hearings. Provisions that include oversight, accountability, verification, and effective enforcement are all included in the federal CAMR rules. Rights of appeal for affected citizens and the ability of the state to use administrative and judicial remedies, where and when necessary, will not change under these rules.

As noted in the preamble of the rule, the Department formed a workgroup prior to proposing these rules. The workgroup invitees included a diverse group of stakeholders. All presentations and workgroup activities were posted on the Department's Air Quality website. The workgroup met five times, and made a number of recommendations to the Department. The Department has carefully considered all workgroup recommendations and public comments in adopting these rules.

With regard to the commenters list of conditions that must apply for any emissions trading program, the Department is limited to the flexibility provided for in the cap and trade approach to implementing CAMR. By choosing the cap and trade approach, the Department is required to implement all components of EPA's cap and trade program within the confines of the flexibility provided by EPA.

Further, the specific purpose of CAMR is to provide a mechanism for achieving national reductions in mercury, as mentioned on the commenter's list. The EPA cap and trade program also achieves some of the other conditions in the commenter's list. For example, the cap and trade approach to CAMR does include automatic and punitive penalties for CAMR units that do not have the required number of allowances to cover emissions. However, CAMR was not designed or intended to achieve many of the goals the commenter included in his list.

The Department's response to the commenter's list of conditions that may not occur in any trading program is as follows:

- **Violation of ambient standards:** There is not a National Ambient Air Quality Standard (NAAQS) for mercury at this time. CAMR does include emissions limits for mercury for new coal-fired units.
- **Expanded pollution at grandfathered sites:** Grandfathered sources of pollution are already exempted from many Clean Air Act requirements, regardless of CAMR. However, any physical or operational change at such a source would require an air construction permit review. Although there is not a NAAQS for mercury or a federal emission standard for mercury emissions from existing coal-fired electric steam generating units (EGUs) at this time, the Department's rule amendments do allow the Director to modify permits at major stationary sources if there is "excessive deposition of mercury." The Department is in the process of reviewing the state of the science

regarding the quantification of mercury emissions and methodologies for monitoring and modeling the deposition of mercury.

- **Significant deterioration of soils, air, water and ecosystems:** Increased deposition of mercury from the ambient air onto soils, vegetation, and water bodies could result in additional human health or ecosystem concerns due to bioaccumulation in the food chain. The provision to allow for a permit to be modified by the Director if an area of excessive mercury deposition is identified is intended to provide a mechanism to address areas in the vicinity of a coal fired EGU where increases due to the CAMR trading program result in deposition rates considered to be excessive. Emissions of mercury from coal-fired EGUs will be permanently capped at 15 tons per year nationwide by 2018. On a national scale, EPA believes that this cap will prevent the further deterioration of soils, water, and ecosystems due to deposition of mercury emissions from this source sector.
- **Increased release of toxics at the point of release, such as heavy metals, neurotoxins, carcinogens, mutagens or bioaccumulative agents:** The CAMR regulations are only applicable to mercury emissions. CAMR does not regulate any other air toxics. EPA does anticipate some co-benefits nationally towards reducing emissions of other air toxics as a result of controlling mercury emissions under CAMR. All regulations regarding the emissions and control of air toxics remain applicable and will continue to be implemented.
- **Backsliding on pollution control obligations:** As discussed in the preamble for this rule, implementation of CAMR is a pollution control obligation that the Department must demonstrate implementation of through a SIP submittal by November 2006. Existing pollution control and permitting requirements for coal-fired EGUs will remain in effect. The only exception to this would be a new unit that had a mercury emission limit previously established under the provisions of Clean Air Act Section 112(g). Section 112(g) allows states to determine, on a case-by-case basis, equivalent hazardous air pollutant emission limits that would apply to a source had an emission standard been promulgated by EPA under section 112(d). There is only one EGU in the state that currently has a mercury emission limit established under section 112(g). The provisions of section 112(g) allow a source to be re-permitted to a section 112(d) emission standard in lieu of the emission limitation established by permit. Since CAMR removes the applicability of 112(g) to mercury, the one source in the state that currently has a 112(g) mercury limit could request a less stringent standard. However, the less stringent standard could not result in a mercury emission limit that is less stringent than the EGU New Source Performance Standard (NSPS) established under CAMR. This NSPS effectively is a backstop that limits the amount of backsliding that could otherwise occur. Based on the regulatory flexibility of the current pollution control requirements, the Department will not be able to prevent backsliding in this one instance if the source requests a less stringent mercury emission limit.
- **Build up of pollution in nonattainment areas:** The provisions of nonattainment only apply to criteria pollutants. Criteria pollutants are pollutants that have a NAAQS.

Mercury is not a criteria pollutant. Therefore, there can be no nonattainment areas for mercury.

- **Monopolization of allowances:** Under the CAMR cap and trade program, allowances are allocated annually to all sources. Excess allowances are traded through a centralized market. Operation of the cap and trade program in this manner prevents monopolization of allowances.
- **Trading in communities that disapprove of trades:** Allocation of allowances is done at a state, rather than community level. Additional allowances are available in a national market system. Local limits on allowance trading are not provided for in the federal program. Iowa statute also prohibits state rules from being more stringent than federal rules.
- **Disproportionate burden on communities already burdened by toxics:** As noted above, the Department has proposed provisions in the rules that allow the Director to modify permits for major sources to mitigate excessive deposition of mercury. The Department is currently reviewing the state of the science on mercury deposition, and is further assessing tools and processes that are available to identify areas of excessive deposition. These initiatives are intended to ensure that communities are not exposed to excessive impacts from mercury deposition.

In summary, the Department must implement cap and trade within the confines required under EPA's CAMR cap and trade rules and under current state statute. The Department has proposed provisions in the rules that allow the Director to modify permits for major sources to mitigate excessive deposition of mercury. The Department is reviewing the state of science on mercury deposition and is assessing tools and processes that are available to identify areas of excessive deposition.

Recommended Action

No action recommended.

Public Comment #5

Provided in writing, by Neila Seaman, Director, Charles Winterwood, Air Quality Chair, and Steve Veysey, Water Quality Chair, of the Sierra Club, Iowa Chapter, Des Moines, Iowa.

The commenter provided comments opposing both the CAIR and CAMR rules.

The first three pages of the commenter's letter describe mercury deposition, its causes, deposition's role in contaminated fish, health effects on pregnant women, and the status of fish advisories nationally and in Iowa.

The commenter discusses the Regional Ambient Fish Tissue (RAFT) data for Iowa. The commenter questions why sites selected for testing weren't more closely located downwind from coal-fired generating units.

The commenter summarizes the Sierra Club's specific opposition to the proposed CAMR rules as follows:

- The proposed cap and trade approach could allow Iowa power plants to purchase credits from downwind states and not achieve pollution reductions here in Iowa;
- The tonnage caps are based on the Bush Administration's Clear Skies program, and do not go far enough or fast enough;
- The proposed rules only require a 70% reduction. Enforcing the Clean Air Act would cut mercury emissions by 90%. Other states have instituted more aggressive emissions control strategies.
- Trading will not avoid the creation of toxic "hot spots"

The commenter noted that the Sierra Club does appreciate the Department's inclusion of the language allowing the Director to modify permits to mitigate excessive deposition of mercury, but has questions about how this would be initiated, and the process for modifying permits.

The commenter recommended that the Department use the STAPPA/ALAPCO model instead of the proposed rules, or at least consult with Illinois on their plans to reduce mercury emissions by 90%.

The commenter further recommends that the Department delay the CAMR rulemaking until other options are investigated and until the federal lawsuits against the federal CAMR regulations are resolved.

Department response

In response to the commenter's point on the Sierra Club's specific opposition to CAMR:

- **Cap and trade allows purchase of credits and will not reduce mercury here in Iowa:** The purpose of CAMR is the nationwide reduction of mercury emissions from coal-fired EGUs, not local or state reductions. The market based system allows for variations in the level of control between states. EPA estimates that implementation of CAMR will result in a 70% reduction of mercury emissions at full implementation. It is reasonable to expect that there will be reductions in mercury emissions in Iowa as a result.
- **Tonnage caps are based on Clear Skies and do not go far enough or fast enough:** The state statute prohibits the Department may not adopt state air quality rules that are more stringent than federal regulations.
- **90% versus 70% reductions:** As noted in the point above, Iowa statute prohibits the Department from adopting state rules that are more stringent than federal regulations. As such, the Department may not institute a 90% reduction in mercury emissions under current authorities.
- **Trading will not avoid the creation of "hot spots:"** CAMR is intended to result in the nationwide reduction of mercury emissions from coal-fired EGUs and is not intended to prevent or remedy hot spots.

With regard to the commenter's questions on the rule change allowing modification of permits for excessive mercury deposition, the Department is evaluating methods to characterize excessive mercury deposition.

In response to the commenter's recommendation that the Department adopt the STAPPA/ALAPCO model, or consult with Illinois on their proposal, the Department may not be more stringent than federal regulations, and thus cannot pursue these options.

With regard to the commenter's recommendation that the Department delay the CAMR rulemaking to investigate other options and until the federal lawsuits are resolved, the Department is under an EPA-imposed deadline to submit changes to its State Implementation Plan (SIP) to adopt CAMR by November 2006. The Department must therefore proceed with the CAMR rulemaking. If the Department does not adopt the CAMR provisions in a timely manner, EPA will use its Clean Air Act authority to implement the cap and trade provisions of CAMR in Iowa. If the lawsuits ultimately result in federal rule changes, the Department will initiate rulemaking to adopt any necessary changes to CAMR.

Recommended action

No action recommended.

Public Comment #6

Provided in writing, via electronic mail, by Michael Jay, U.S. Environmental Protection Agency Region 7, Air RCRA, Toxics Division, Air Planning and Development Branch, Kansas City, Kansas.

The commenter provides three areas of public comment applicable to the CAMR notice.

- 1) The first comment questioned whether or not the Department should be using the effective date of the federal regulations for CAMR, rather than the Federal Register promulgation date, when adopting federal regulations by reference into the Iowa Administrative Code (IAC). The comment also noted that EPA has proposed amendments to the federal CAMR regulations, which could affect the Department's rules.
- 2) The second comment pointed out an inconsistency in the Department's intent to classify units as "new" and "existing" in the allocation tables, and the fact that the proposed rules include adoption of a portion of the federal regulations that specifies how "new units" automatically become "existing units" at a later date.
- 3) The third area of comment pertained to Iowa's allowance allocations. The commenter pointed out that the EPA, as manager of the trading program, could elect to record the allowances specified in the Department's proposed allowance tables indefinitely into the future, rather than just the minimum amount of time required under the federal regulations. This pertains to a possible future change in a section of the federal regulations that specifies how many years in advance that EPA will record allocations.

EPA Region VII provided follow-up to the public comments above in subsequent e-mail messages transmitted to the Department on April 10 and April 11, 2006. A summary of these comments are as follows:

- 4) EPA provided additional follow-up to comment #1 above. EPA suggested exchanging the term "amended through" for federal regulation adoptions with the term "published on," or, alternatively, that the Department address the issue in its response to comments. EPA stated that, when federal regulations are published in the Federal Register (FR), the Code of Federal Regulations (CFR) is not actually amended on the FR publication date. The CFR is not officially "amended" until the effective date noted in the Federal Register, which is typically 30 or 60 days after the Federal Register publication date.

Department response

- 1) **Federal rule promulgation versus effective date:** Adoption by reference of federal regulations into state rules must have a federal regulation promulgation date. Since this is an adoption by reference, the effective date of the federal regulation is also adopted. State rules clearly state the federal regulation citation, followed by "as adopted or amended through [Federal Register promulgation date]." In some cases, if the state is not required to adopt federal regulations until a date later than the promulgation date, the Department will also include an effective date in the rule published in the Iowa Administrative Code. With regard to federally proposed changes to CAMR, the Department cannot make state rule changes until the federal amendments are final. At such time, the Department shall undertake rulemaking to make any necessary changes to state rules.
- 2) **Inconsistency in classifying "new" and "existing" CAMR units:** The Department inadvertently included a portion of the federal rules for adoption that is not consistent with the Department's plans to characterize new and existing units. The allocation tables make this clear. However, the federal language describing how a new unit automatically becomes an existing unit at a later date should be excluded, and clarifying language should be added to the state rules.
- 3) **Allocations and timing of EPA recordation:** It is the Department's understanding that EPA will only record allowances specified in the time periods in the federal regulations. However, the Department has since learned that EPA may change the federal timing for recordation. It is the Department's intent to only allocate allowances for the minimum control period (year) specified under the federal regulations, not for any additional control periods (years) into the future. The Department agrees that this intent should be clarified in the final rules.
- 4) **Adoption of federal regulations and amendment dates:** Whenever the Department refers to a federal regulation in the Iowa Administrative Code, the Department is acting on power that has been delegated to the Department by the Iowa Legislature. The Department must be careful not to "re-delegate" to EPA by not clearly understanding (and making the public understand) the version of the federal regulations that the Department intends to use.

If the Department refers to a date when the federal regulations becomes effective, rather than a date of publication in the Federal Register, the Department is failing to provide the public with a clear understanding of what version of the federal regulations is being adopted into the Department's rules. The Department wants the public to be able to take the date from the "as amended through" phrase in the rule, and find a corresponding Federal Register notice that allows the public to understand what the state rule intends.

If the Department instead uses the language "as published on (date)" rather than "as amended through (date)," the Department will fail to convey that the Department is adopting by reference the federal regulations as **amended** through a certain date. It is correct to state that the Department is adopting by reference federal regulations as they have been **amended** through a date that is prior to their effective date, because regulations are amended before they **then** become effective.

Since an amendment is the official act of the agency (the EPA), it is appropriate for Department to use the Federal Register publication of that official EPA act as the date to describe the federal regulation to which the Department refers. Although the federal regulations are not effective on the date of final publication, it is not reasonable to expect the public to count backwards from an effective date to find a federal register publication. A member of the public would not necessarily know how far to count back. The Department's legal staff has, in the past, consulted the state's Legislative Services Agency (LSA) legal staff about this particular subject. The LSA legal staff has been satisfied that the use of the phrase "as amended through" is sufficient to clearly designate the version of the federal regulations to which the Department refers.

Recommended action

- No action recommended in response to EPA's comments regarding the Department's adoption by reference of federal regulations, and the appropriate use of federal amendment dates, publication dates, and effective dates. The Department intends to continue its practice of using the language "as amended through (date)" when referring to federal regulations in the Iowa Administrative Code.
- The Department will add clarifying language to the state rules to make clear that "new units" for CAMR remain "new units," and will not be automatically classified as "existing units" at a later date. However, it should be noted that any interested party could petition the Department for rulemaking that would potentially allow this.
- The Department will add clarifying language to the state rules to make clear that annual Hg allowances will be allocated to a control period (year) in the future only to the minimum timing requirements specified under the federal regulations.

Public Comment #7

Provided in writing by Susan L. Ekstrom, of Ekstrom and Burkey, Attorneys at Law, Des Moines, Iowa.

The commenter asked that we continue with the Department's mercury rules, but modify the rules to cut mercury emissions by 90% rather than the proposed 70%. The commenter also asked that the Department not adopt the cap and trade approach. Lastly, the commenter asked that the Department consider the STAPPA/ALAPCO model for mercury rules.

Department response

In implementing CAMR, the Department cannot implement a 90% reduction in mercury emissions, or adopt the STAPPA/ALAPOC model rules, because these proposals would be more stringent than the federal CAMR regulations. Iowa statute specifies that state air quality rules may not be more stringent than federal air quality regulations.

The cap and trade approach was recommended by the majority of the CAMR-CAIR workgroup members. The Department considers this to be the appropriate method for implementing a national reduction in mercury emissions from coal-fired power plants.

Recommended action

No action recommended.